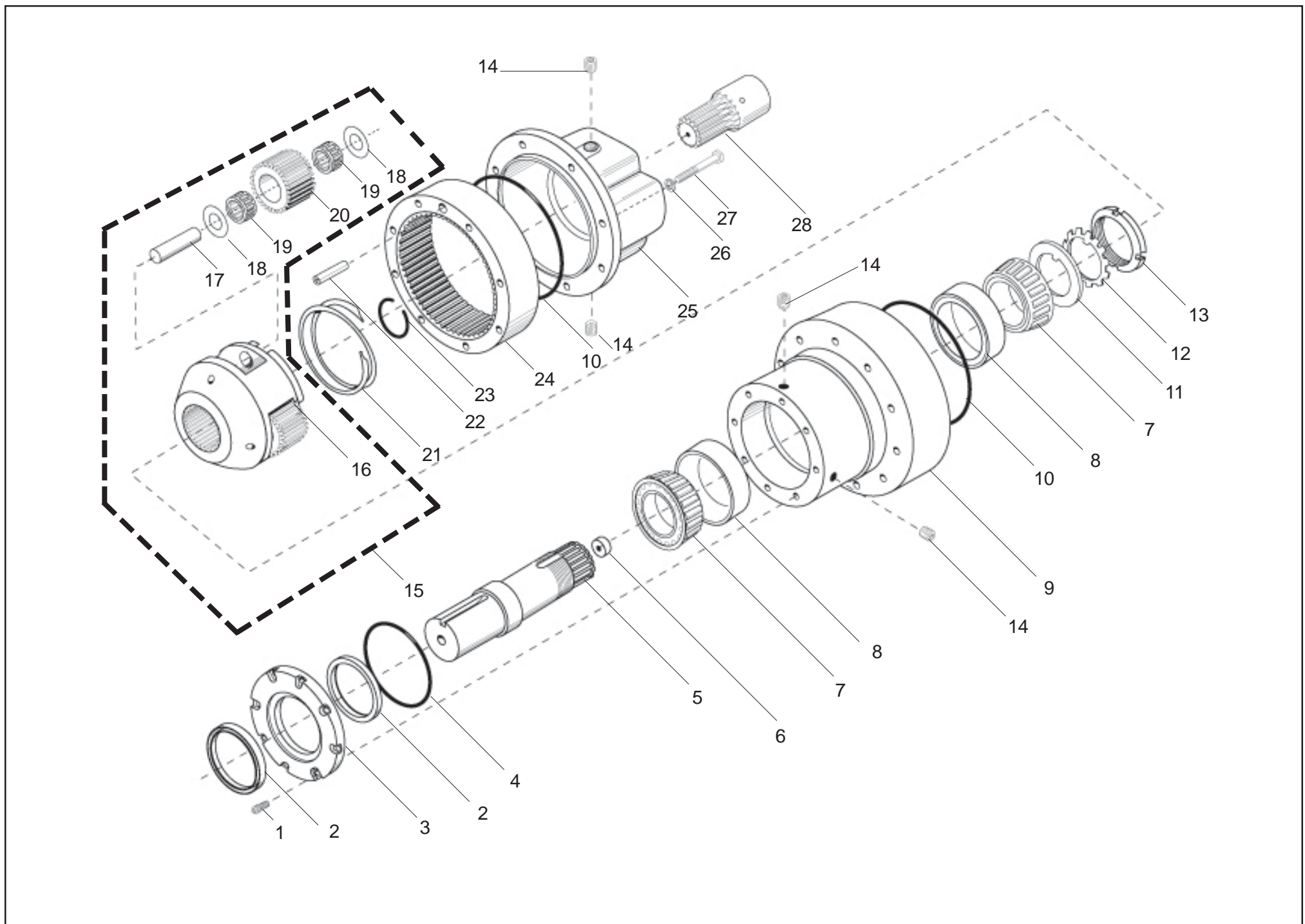
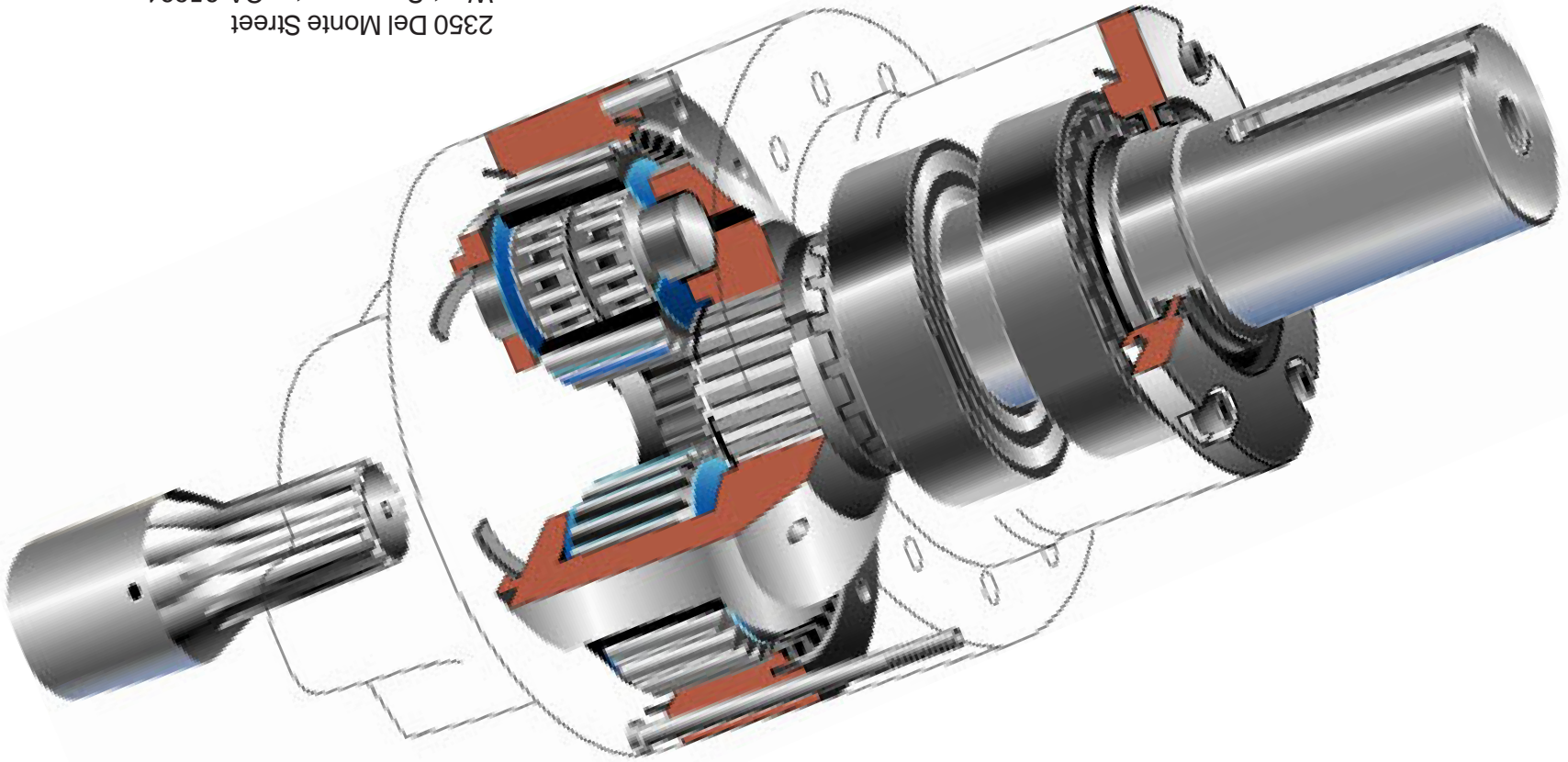


ITEM #	PART #	DESCRIPTION	QTY/ASSY
1.	151110	Cap Screw	8
2. ⁽²⁾		Shaft Seals	2
	251100	Seal -- Buna	
	251090	Seal -- Viton	
3.	251160	Seal Carrier	1
4. ⁽²⁾		Seal Carrier O-Ring	1
	251320	O-Ring Buna	
	251330	O-Ring Viton	
5.		Output Shaft	1
	200210	3.375" Straight Keyed	
	200440	2.75" Straight Keyed	
	200530	8 Hole Flanged	
	20057A	23 Tooth Splined	
6.	150152	Thrust Plug	1
7.	251540	Bearing Cone	2
8.	251550	Bearing Cup	2
9.		Front Housing	1
	251200	25 Center Flange Housing	
	251560	25 Front Flange Housing	
	251590	25AF Housing	
10.		O-Ring	2
	201010	O-Ring Buna	
	201015	O-Ring Viton	
11.	201280	Keyed Washer	1
12.	201060	Lock Washer	1
13.	201070	Lock-Nut	1
14.	201100	Pipe Plug	6
15. ⁽¹⁾		Planet Carrier Assembly	
	250004	4.8:1 Planet Assembly	
	250005	6:1 Planet Assembly	
16. ⁽¹⁾	251110	Planet Carrier	1
17. ⁽¹⁾	251120	Planet Pin	3
18. ⁽¹⁾	251190	Thrustwasher	6
19. ⁽¹⁾	251180	Needle Bearing	6
20. ⁽¹⁾		Planet Gears	3
	251440	Planet Gear 4.8:1	
	251460	Planet Gear 6:1	
21. ⁽¹⁾	251140	Retaining Ring	1
22.	251750	Spring Pin	1
23. ⁽¹⁾	200110	Wire Lock Retaining Ring	1
24.		Ring Gear	1
	251450	Ring Gear 4.8:1	
	251470	Ring Gear 6:1	

ITEM #	PART #	DESCRIPTION	QTY/ASSY
25.		Motor Adapter	1
	200240	SAE C 2/4 Bolt	
	200260	SAE C VIS	
	200701	SAE A 4 bolt	
26.	201080	Lock Washer	8
27.	201090	Hex Cap Screw	8
28.		Input Shaft Adapter	1
	20F4	Charlynn 4000 Bearingless 4.8:1 Sun Gear	
	20F6	Charlynn 4000 Bearingless 6:1 Sun Gear	
	20G4	Charlynn 6000 Bearingless 4.8:1 Sun Gear	
	20G6	Charlynn 6000 Bearingless 6:1 Sun Gear	
	20I4	1 1/4 Tooth 4.8:1 Sun Gear	
	20I6	1 1/4 Tooth 6:1 Sun Gear	
	25V6	Charlynn VIS-30 Bearingless 6:1 Sun Gear	
		Seal Kits	
	25932	25-1 Seal Kit -- Buna	
	25933	25-1 Seal Kit -- Viton	
		⁽¹⁾ All items contained in part number 15. (Planet Carrier Assembly)	
		⁽²⁾ Items included in the Seal Kit	
		* Disassembly Note: Item (23) -- wire locking retaining ring. Item (23) retains the planet carrier assembly (15) to the output shaft (5). To remove the planet carrier this ring must be removed. To remove (23) take two screw drivers and reach down into the planet carrier assembly and pry the wire lock (23) out of its groove in the end of the shaft (5).	





Parts and Lubrication Information

Model 25

LUBRICATION INSTRUCTIONS

The HecoGear Inc. Model 25 planetary speed reducer may be lubricated using one of two methods.

Self-Contained Lubrication

If you are using self-contained lubrication you need to install the proper amount of lubrication fluid into the speed reducer. The amount for fluid depends on the mounting orientation of the speed reducer.

Model 25 Oil Capacity

1/2 Full	48 oz.	(16 dl)
Full	96 oz.	(26 dl)

Recommended Lubricant

For maximum speed reducer life the recommended oil is SAE 85W-140 Multi-Grade gear oil, meeting API-GL5 and API-MT1 service. An alternate oil that will provide adequate speed reducer life is SAE 90W gear oil, meeting API-GL5 and MT1 service. These lubricants should be readily available at your local automotive stores or local distributor.

Shaft horizontal — it is recommended that the speed reducer be filled 1/2 full.

Vertical Shaft Down — with the shaft facing down fill the speed reducer to the level of the centerline of the upper gear set prior to installing the motor.

Vertical Shaft Up — the speed reducer must be completely filled and provision for

maintaining a fluid level at or above the top shaft bearing is required. This can be done using a “stand pipe” or small reservoir.

“Flow Through” Lubrication

In this method of lubrication, fluid from the hydraulic system is used to lubricate the hydraulic speed reducer. This is most commonly done using a “bearingless” hydraulic motor which has no shaft seal and the internal leakage of the motor flows into and lubricates the speed reducer. A petroleum based hydraulic fluid with EP1 additives and a minimum of .125% zinc anti-wear additives should be used to ensure good speed reducer life at rated torques and speeds.

Biodegradable fluids and water glycol fluids can be used below the maximum ratings of the speed reducer. (Contact HecoGear for your specific application).

The speed reducer should be completely filled with hydraulic fluid before the hydraulic motor is installed.

Case Drains — No case drain is required with self-contained lubrication. On units with flow through lubrication you do not need to case drain the unit unless the return pressure line pressure from the hydraulic motor exceeds 50 PSI; as it does if the motor is in series of you are using a “meter out” flow control.

The most popular hydraulic motor connected to the Model 25 HecoGear speed reducer that provides a “Flow Through” lubrication is the Charlynn 6000 series bearingless hydraulic motor.

C/L 6000 Bearingless

Connect case drain to the hydraulic motor or to the speed reducer

If a case drain is required for your application care must be taken to ensure that the drain is taken from the proper location so that all internal components are internally lubricated. The case drain should be taken from the high point of the motor/reducer.

Maximum Oil Temperature

160° F (70° C) Continuous
180° F (82° C) Intermittent
Consult HecoGear, Inc. for higher temperatures

Periodic Maintenance

Reducers using self-contained lubrication should have the fluid drained after the first 50 hours of operation and the reducer should be flushed with flushing oil, drained and then replaced with the proper fluid. This should also be done every 1,000 hours thereafter. Reducers using flow through lubrication require no periodic maintenance.